

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently Amended) A system for remote controlling and monitoring a home appliance, comprising:

a first home appliance having a master function, the master function being provided ~~only~~ to the first home appliance;

at least one second home appliance having a slave function, wherein the master function is configured to control the slave function; and

a communication line path for communication to a next second home appliance only after transmitting at least one packet to the second home appliance and receiving a reply of the at least one packet from the second home appliance ~~between the first home appliance and at least one of the second home appliances.~~

2. (Previously Presented) The system of claim 1, wherein a personal computer communicating with remote appliances is the first home appliance.

3. (Previously Presented) The system of claim 1, wherein the master function includes:
an application layer producing a command code and a factor code from packet data of a received message and analyzing a return packet;

a data connecting layer constituting a packet of data to be transmitted, producing an error checking code, and repeatedly transmitting the packet if a return packet is a NAK or not found; and

a physical layer checking an address of the packet produced in the data connecting layer, determining whether a communication line path between the first appliance and the second appliance is vacant to transmit the packet, and delivering the transmitted packet to the data connecting layer.

4. (Previously Presented) The system of claim 1, wherein the slave function includes: an application layer carrying out a command of the received packet and returning an execution result of the command;

a data connecting layer transmitting the received packet to the application layer, transmitting a NAK packet if an error is found in the received packet, constituting a return packet, and producing an error checking code; and

a physical layer checking an address of the packet produced in the data connecting layer, determining whether a communication line path between the master and slave is vacant to transmit the packet, and delivering the transmitted packet to the data connecting layer.

5. (Original) The system of claim 4, wherein the data connecting layer and the physical layer are constituted as one module.

6. (Previously Presented) The system of claim 1, wherein the first and second home appliances communicate with each other in a half-duplex method such that the first and second

home appliances communicate with each other in both directions and are not configured to transmit and receive messages at the same time.

7. (Canceled)

8. (Currently Amended) A method for remote controlling and monitoring a home appliance, in which a system and a method for remote controlling and monitoring a home appliance are provided with a first home appliance, a second home appliance, and a communication line path for communication between the first and second home appliances, comprising:

having a first home appliance perform processes of reading information of the second home appliance to set communication speed and packet length corresponding to the information, constituting a user command as a first packet with the preset length, and transmitting the first packet to a second home appliance at the preset speed;

having the second home appliance corresponding to the first packet perform processes of receiving the first packet, checking an error, performing the command of the first packet and constituting ~~a~~ the second packet of ACK if an error is not found in the first packet and constituting the second packet of NAK if an error is found in the first packet, and transmitting the constituted second packet to ~~only~~ the first home appliance; and

having the first home appliance perform processes of checking whether the second packet is received, and transmitting the next packet or re-transmitting the first packet according to a result obtained from said checking, wherein the first home appliance is configured to start

communication with a next second home appliance only after transmitting the first packet to the second home appliance and receiving the second packet from the second home appliance.

9. (Previously Presented) The method of claim 8, wherein the first packet includes:

a starting code (STX) of the packet;

a requester address, a second home appliance address to which the packet is transmitted;

a requestee address, a first home appliance address;

a packet length code indicating the number of bytes constituting the packet;

a message of control orders;

a CRC code for error checking; and

an ending code (ETX) of the packet.

10. (Previously Presented) The method of claim 8, wherein the second packet includes:

a starting code (STX);

a requester address, a first home appliance address to which the packet is transmitted;

a requestee address, a second home appliance address from which the packet is transmitted;

a packet length code indicating the number of bytes constituting the packet;

a control command code and executing or non-executing code;

a CRC code for error checking; and

an ending code (ETX) of the packet.

11. (Previously Presented) The method of claim 8, wherein if the amount of the user command data is more than a preset amount in the second step, the first packet is constituted by being divided and the communication speed is adjusted.